



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/672,212

09/26/2003

Maurice Smith

34171

2888

23589

7590

01/05/2009

HOVEY WILLIAMS LLP

10801 Mastin Blvd., Suite 1000

Overland Park, KS 66210

EXAMINER

MEYERS, MATTHEW S

ART UNIT

PAPER NUMBER

3689

MAIL DATE

DELIVERY MODE

01/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/672,212	Applicant(s) SMITH ET AL.	
	Examiner MATTHEW S. MEYERS	Art Unit 3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's communication on 10/10/08, wherein claims 1-4 and 6-11 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant sets forth "establishing a hierarchy", but does not provide sufficient guidance of direction as to how one skilled in the art would establish this hierarchy without undue experimentation. After reviewing applicant's specification, Examiner is unable to ascertain how applicant intends to establish this hierarchy when applicant has not given any guidance or direction.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 and 6-11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims uploading the report, but has not

Art Unit: 3689

positively recited creating a report. Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed. MPEP 2111.04.

5. New Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims that the remote sensing unit acts to properly orient themselves upon hitting the ground. It is unclear as to what applicant means by "proper orientation". Is applicant referring to a geophysical orientation achieved by some signal or the orientation of the sensor itself?

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter. Presently, applicant does recite a tie to another statutory class however the tie is nominal since it is essentially providing and gathering data which Examiner has interpreted to be extra-

Art Unit: 3689

solution activity thus insignificant to the overall method steps. Applicant's preamble With respect to claims 1-4 and 6-11, the claim language does not include the required tie or transformation and thus is directed to nonstatutory subject matter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-4 and 6-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt US 6490530.

2. With respect to claim 1, Wyatt discloses a method of evaluating a threat posed by substance (reference provides an aerosol hazard classification and early warning network, see abstract), the method comprising the steps of:



Art Unit: 3689

- a. deploying a plurality of remote sensing units and a control unit adapted to automatically identify the substance and to provide a corresponding report wherein the report comprise an image of the substance (detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 -44 and a need for spectroscopic techniques was recognized in the early 1970's, col. 3, lines 5-10, col. 12, lines 20-25, The CPU will collect and process such identification or classification results to determine other aerosol particle properties following the on-board CPU instructions." and col. 14, lines 3-11, "Such information includes estimates of threat characteristics..." and detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 - 44 and "detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25-29);
- b. uploading the report to a remote server via a system chosen from the group consisting of a cell phone network and a satellite phone network (detector stations capable of measuring and classifying aerosol particles, and reporting all processed data via integrated telecommunications to a central control station, col. 8 lines 29-45 and col. 3, lines 36-52, "communications/telemetry

Art Unit: 3689

module");

American Heritage Dictionary - Cite This Source - Share This

te·lem·e·try   (tə-lēmĭ-trē) [Pronunciation Key](#)

n. The science and technology of automatic measurement and transmission of data by wire, radio, or other means from remote sources, as from space vehicles, to receiving stations for recording and analysis.

- c. establishing a hierarchy of threat response and evaluation authorities, wherein the evaluation authorities include , including a plurality of experts having knowledge relevant to making a high-level threat assessment (interpreted to be the sending of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65 - col. 14 line 3) (Examiner notes that these agencies are response and evaluation authorities.); and
- d. allowing the hierarchy of threat response and evaluation authorities to access the report on the remote server via a wide area network (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3) (Examiner notes that these agencies are response and evaluation authorities.).
- e. Wyatt discloses all the above limitations, but does not explicitly disclosed wherein the step of uploading is to a secure remote server. However, it would have been obvious to one of ordinary skill or creativity at the time of the invention to have used a secure socket or other form of encryption to have securing

Art Unit: 3689

uploaded the data to a remote server. This step would have been well within the ordinary skill level of one uploading data to a central station via a communication/telemetry module (Wyatt col. 13, lines 36-52).

3. With respect to claim 2, Wyatt discloses a method of evaluating a threat posed by a substance, further including the steps of providing the remote server with evaluation tools for automatically evaluating, the report in light of other relevant data (interpreted to be the evaluation of the threat posed by and likely movement of the aerosol cloud by the central station, integrated with meteorological data, col. 13 lines 41 - 43, 51 - 54 and 60 - 63).

4. With respect to claim 3, Wyatt discloses a method of evaluating a threat posed by substance (reference provides an aerosol hazard classification and early warning network, see abstract), the method comprising the steps of:

f. deploying a plurality of remote sensing units and a control unit adapted to automatically detect and identify the substance and to provide a corresponding report, wherein the report includes a magnified image of the substance (detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 - 44 and "detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25-

Art Unit: 3689

29) (Examiner notes that this results in a magnified image);

[WordNet - Cite This Source - Share This](#)
aerosolized


adjective

in the form of ultramicroscopic solid or liquid particles dispersed or suspended in air or gas

g. uploading the report to a remote server (detector stations capable of measuring and classifying aerosol particles, and reporting all processed data via integrated telecommunications to a central control station, col. 8 lines 29 - 45);

h. determining an actual geographic location of a remote sensing unit detecting the substance using the remote sensing unit, communicating the actual geographic location to the control unit, and identifying an appropriate local reporting authority and an appropriate local reporting policy based upon the actual geographic location of the remote sensing unit detecting the substance (interpreted to be inherently disclosed as the reference teaches the reporting of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65- col. 14 line 3) (Examiner notes this may be done using triangulation since Wyatt transmits data via its communication/telemetry module;

[The American Heritage Science Dictionary - Cite This Source - Share This](#)

triangulation  (trī-āng'gyə-lā'shən) [Pronunciation Key](#)

A method of determining the relative positions of points in space by measuring the distances, and sometimes angles, between those points and other reference points whose positions are known. Triangulation often involves the use of **trigonometry**. It is commonly used in the navigation of aircraft and boats, and is the method used in the **Global Positioning System**, in which the reference points are satellites.

Art Unit: 3689

- i. notifying the appropriate local reporting authority of the report in accord with the appropriate local reporting policy (threat analyses are sent to various civil, police and' emergency agencies, col. 13 lines 65 - col. 14 line 3);
 - j. establishing a hierarchy of threat evaluators, including a plurality of experts having knowledge relevant to making a high-level threat assessment (interpreted to be the sending of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65 - col. 14 line 3); and
 - k. allowing the hierarchy of threat evaluators to access the report on the remote server via a wide area network (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3).
- l. Wyatt discloses all the above limitation, but does not explicitly disclose wherein the determining step is provided by a GPS device located on the remote sensing unit, communicating the actual geographic location to the control unit. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to have added a global positioning system to the remote sensor in order to have a secondary confirmation on where the sensor is located. Wyatt already places sensor station which have the capability of satellite communication which inherently would allow them to be located using

Art Unit: 3689

triangulation, which Wyatt does not explicitly disclose. However, Wyatt is able to ascertain where its stations are when communicating with the central station in order to estimate the threat characteristics of the data it collects (Wyatt col. 13 line 65 - col. 14 line 3). Nevertheless, it would have been obvious to one of ordinary skill and creativity at the time of the invention to have included a separate GPS system to the remote sensors.

5. With respect to claim 4, Wyatt discloses a method of evaluating a threat posed by a substance, further including the steps of providing the remote server with evaluation tools for automatically evaluating the report in light of other relevant data (interpreted to be the evaluation of the threat posed by and likely movement of the aerosol cloud by the central station, integrated with meteorological data, col. 13 lines 41 - 43, 51 - 54 and 60 - 63).

6. With respect to claim 5, Cancelled.

7. With respect to claim 6, Wyatt discloses The method as set forth in claim 1, wherein the response authorities are chosen from the group consisting of local first responders, state agencies, state departments, regional agencies, regional departments, national departments, and national agencies (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3).

8. With respect to claim 7, Wyatt discloses The method as set forth in claim 1, wherein the evaluation authorities include experts on subjects chosen from the group

Art Unit: 3689

consisting of medical issues relating to exposure to chemical substances, medical issues relating to exposure to biological substances, medical issues relating to exposure to radioactive substances, law, law enforcement, policy, doctrinal issues, historical cases, modeling, and simulation(interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3).

9. With respect to claim 8, Wyatt discloses the method as set forth in claim 1, wherein the image of the substance is a microscope-magnified image ("detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25-29) (Examiner notes that this results in a magnified image).

10. **Claims 3 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt in view of 42 USC 11023 (a) (enacted October 17, 1986).

11. With respect to claim 3, Wyatt discloses a method of evaluating a threat posed by substance (reference provides an aerosol hazard classification and early warning network, see abstract), the method comprising the steps of: deploying a plurality of remote sensing units and a control unit adapted to substantially automatically identify the substance and to provide a corresponding report (detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 - 44); uploading the report to a remote server (detector stations capable of measuring and classifying aerosol

Art Unit: 3689

particles, and reporting all processed data via integrated telecommunications to a central control station, col. 8 lines 29 - 45); establishing a hierarchy of threat evaluators, including a plurality of experts having knowledge relevant to making a high-level threat assessment (interpreted to be the sending of threat analyses to various civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region, col. 13 line 65 - col. 14 line 3); and allowing the hierarchy of threat evaluators to access the report on the remote server via a wide area network (interpreted to be the access of various respective threat analyses by civil, police, emergency and other agencies responsible for population health and safety throughout and surrounding the monitored region through telemetry means, col. 13 line 65 - col. 14 line 3).

12. In the event that Wyatt may be determined not to disclose the remaining limitations of claim 3, 42 USC 11023(a) teaches the remaining limitations of claim 3.

13. 42 USC 11023 (a) requires that the operator of a facility subject to the requirements of the section complete and submit a toxic chemical release form to the EPA Administrator and to an official or officials of the State designated by the Governor of the respective state. 42 USC 11023 (a) is therefore interpreted to provide a method of identifying an appropriate local reporting authority (the State in which the toxic chemical was released) and an appropriate local reporting policy based upon an actual geographic location of the substance (the Governor of the State in which the toxic chemical was released designates official(s) for the report to be submitted to, i.e. a local reporting policy). 42 USC 11023 (a) is also interpreted to provide a method for notifying

Art Unit: 3689

the appropriate local reporting authority of the report in accordance with appropriate local reporting policy (a report must be submitted to an officials designated by the Governor of the State). Thus, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the method of Wyatt with local reporting and associated policies based on geographic locations required by 42 USC 11023(a) in order to provide a more efficient and useful method of evaluating a threat posed by a substance.

14. With respect to claim 4, Wyatt discloses a method of evaluating a threat posed by a substance, further including the steps of providing the one or more data processing and storage servers with evaluation tools for substantially automatically evaluating the report in light of other relevant data (interpreted to be the evaluation of the threat posed by and likely movement of the aerosol cloud by the central station, integrated with meteorological data, col. 13 lines 41 -43, 51 - 54 and 60 - 63).

4. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt as applied to claim 1 above, and further in view of Ishizaka et al. (U.S. 5,077,010) (Hereinafter referred to as Ishizaka).

15. With respect to claim 9, Wyatt discloses the above method steps, Wyatt does not explicitly further comprising collecting the substance with a sample examination cassette including: a roll of filter paper for receiving the substance; a roll of film providing an impermeable barrier for isolating the substance; and an archive spool for collecting the roll of filter paper and the roll of film. However, Ishizaka teaches a long-test-film cassette for biochemical analysis and system for loading the same which

Art Unit: 3689

teaches a roll of filter paper for receiving the substance (Ishizaka, Fig 1, item 7); a roll of film providing an impermeable barrier for isolating the substance (Ishizaka, Fig 1, item 3); and an archive spool for collecting the roll of filter paper and the roll of film (Ishizaka, Fig 1, item 2). It would have been obvious to combine the aerosol hazard characterization and early warning network of Wyatt with the long-test-film cassette for biochemical analysis of Ishizaka in order to record and archive the data produced from the system of Wyatt, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyatt as applied to claim 1 above, and further in view of University of Virginia Patent Foundation (PCT/US00/04027) (Hereinafter referred to as UV).

16. With regard to claims 10 and 11:

17. Wyatt discloses all the above claimed limitations. Additionally, Wyatt discloses claim 1, wherein the remote sensing units are deployed at a distance by a airborne vehicles (Using spectrophotometer equipped airborne vehicles, the reaction of these specially prepared particles with dangerous chemicals or particles would produce characteristic emissions capable of detection by the airborne instrumentation. col. 3, lines 36-40). Wyatt does not explicitly disclose wherein the remote sensing units are deployed by being airdropped into an area containing a potentially hazardous substance or wherein the remote sensing units act to properly orient themselves upon hitting the ground. UV discloses a passive remote sensor of chemicals which may be designed for

Art Unit: 3689

airdrop deployment (UV, page 66, lines 1-8). It would have been obvious to one of ordinary skill in the art to include this method of deployment as taught UV in the system of Wyatt, since the claimed invention is merely a combination of old elements, and in the combination each element would have preformed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of this combination were predictable.

Response to Arguments

6. Applicant's arguments filed 10/10/08 have been fully considered but they are not persuasive.

7. With respect to applicant's arguments regarding claims 1, 3 and 8, that Wyatt does not disclose an image of the substance, nor a report comprising an image of the substance, Examiner respectfully disagrees. Wyatt discloses detector stations capable of measuring and classifying aerosol particles, col. 8 lines 34 -44 and "detector stations," are capable of performing a set of scattered light measurements by which the target aerosol particles are well classified and/or identified, one-at-a-time, at each locale where they are detected. Col. 5, lines 25-29. Examiner is interpreting the results of scattered light measurements as image of the substance since scatter light measurements are displayed graphically as images. Subsequently, the detector stations report all processed data via integrated telecommunications to a central control station, col. 8 lines 29 - 45 which would meet applicants limitation of a report of the image.

Art Unit: 3689

8. With respect to applicant's argument regarding claim 10, Examiner has addressed this new limitation in the above action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW S. MEYERS whose telephone number is (571)272-7943. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan Mooneyham can be reached on (571) 272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Meyers/
Examiner, Art Unit 3689

/Dennis Ruhl/

Primary Examiner, Art Unit 3689

Application/Control Number: 10/672,212
Art Unit: 3689

Page 18